

# **S. 2262, Shaheen-Portman Bill 2014: Energy Savings and Industrial Competitiveness Act**

Updated May 14, 2014

**Congressional Research Service**

<https://crsreports.congress.gov>

R43524

## Summary

S. 2262 has four energy efficiency titles, which address buildings, industry, federal agencies, and certain regulatory measures. Title V would provide a budgetary offset for bill authorizations. The bill was derived directly from S. 1392, often referred to as the Shaheen-Portman bill of 2013. During the first session, floor action on S. 1392 was halted by a push for votes on controversial non-energy amendments. Many energy amendments were also prepared for S. 1392, but floor action stopped before formal consideration.

In the second session, anticipating the potential for further procedural battles, bill sponsors sought to expand the S. 1392 framework. The aim of expanding the bill was to secure enough additional votes to address the potential for a filibuster by ensuring sufficient votes for cloture on debate. The expanded bill was introduced as S. 2074. It contains all the core provisions of S. 1392, and the text of 10 bipartisan amendments that had been proposed for S. 1392 in floor action during 2013. The text of S. 2262 is identical to that of S. 2074, except that the amount of budget offsets in section 501 was increased from \$638 million to \$720 million (for FY2014 through FY2018).

This report reviews the provisions of S. 2262, highlights the most controversial bill provision, and identifies potential amendments to the bill.

The most controversial provision in S. 2262 is section 431. That section is an updated version of S.Amdt. 1917 to S. 1392 (Hoeven-Manchin amendment). Section 431 would repeal an existing requirement to eliminate fossil energy use in new federal buildings by 2030. DOE has found the provision difficult to implement, and has not yet issued a rule to enforce it. In place of that requirement, section 431 would tighten energy efficiency guidelines and building codes for new federal buildings—but to a lesser degree. Supporters assert that the existing prohibition is unworkable, citing DOE’s inability to implement it and the “more feasible” goals in section 431. Opponents claim that the amendment would undermine federal leadership-by-example on net-zero energy buildings and on the effort to reduce federal greenhouse gas emissions.

The American Council for an Energy-Efficient Economy (ACEEE), which has publicly stated support for the bill, estimates an energy-saving potential of 1.8 quadrillion Btu (quads) by 2030, with an associated cost-saving potential of \$16.2 billion. S. 2262 was designed to be deficit neutral. The Congressional Budget Office (CBO) estimates that it would provide a net decrease in the federal budget deficit of \$12 million over the period from FY2014 through FY2024.

Bill sponsors reported that over 270 businesses, associations, and trade groups—from the National Association of Manufacturers to the Chamber of Commerce—support S. 2262. The Obama Administration expressed support for S. 1392, but it has not yet issued a Statement of Administration Policy on S. 2262. In opposition to S. 2262, Heritage Action—an advocacy group affiliated with the Heritage Foundation—argues that the incentives in the bill “would burden taxpayers and consumers alike while producing no tangible benefits.”

A cloture vote brought S. 2262 up for Senate floor action on May 6, 2014. Floor debate focused on the potential for action on five energy-related amendments, covering the issues of Keystone XL pipeline, liquefied natural gas (LNG) exports, power plant carbon capture technology, social cost of carbon, and carbon tax. An effort to forge an agreement to limit amendments did not succeed. On May 12, 2014, a cloture vote to close debate failed (55-36), whereupon the Majority Leader entered a motion to reconsider the vote.

## Contents

Background .....	1
Action on S. 1392.....	1
Action on S. 2074.....	2
Action on H.R. 2126 .....	2
S. 2262 Provisions .....	2
Overview .....	2
Tabular Summary .....	2
Most Controversial Bill Provision .....	6
Energy Savings Estimate .....	6
CBO Cost Estimate .....	7
Support and Opposition.....	7
Senate Floor Action .....	8
Floor Amendment Highlights .....	9
Non-Energy Amendment: Affordable Care Act .....	9
Energy-Related Amendments.....	9
Keystone XL Pipeline .....	9
Liquefied Natural Gas (LNG) Exports.....	10
Power Plant Carbon Capture.....	10
Social Cost of Carbon .....	10
Carbon Tax.....	11
Current Status.....	11

## Tables

Table 1. S. 2262, Tabular Summary of Selected Provisions .....	3
Table 2. ACEEE Energy Savings Estimates for S. 2074 .....	6

## Appendixes

Appendix. S. 2262 Detailed Provisions.....	12
--	----

## Contacts

Author Information.....	18
-------------------------	----

## Background

The first version of the Energy Savings and Industrial Competitiveness Act was introduced as S. 1000 in the 112<sup>th</sup> Congress. It had three energy efficiency titles, which addressed buildings, industry, and federal agencies. Title IV provided a budgetary offset for bill authorizations. The bill was reported by the Senate Committee on Energy and Natural Resources (SENR), but received no further action. Early in the 113<sup>th</sup> Congress, S. 761 was introduced as a revised version of S. 1000.<sup>1</sup> S. 761 was then revised and introduced as S. 1392. Floor action on S. 1392 was halted in September 2013.

## Action on S. 1392

S. 1392—the Energy Savings and Industrial Competitiveness Act of 2013—was introduced on July 30, 2013. Often referred to as the Shaheen-Portman bill 2013, it was a trimmed-down version of S. 761 from the 112<sup>th</sup> Congress. It contained provisions for building energy codes, industrial energy efficiency, federal agencies, and budget offsets. The bill contained voluntary provisions and was designed to be deficit-neutral. Virtually all debate on the bill was focused on floor amendments.

The bill was reported by the Senate Committee on Energy and Natural Resources (SENR) on a 19-3 vote. On August 1, 2013, a motion to proceed was introduced and amendments began to be filed. On September 11, 2013, a unanimous consent agreement on the motion launched floor action. By September 19, 2013, 125 amendments had been proposed. Of that total, 75 directly addressed energy efficiency policy, 23 addressed “other” energy and carbon emissions policy areas, and 27 addressed non-energy policy areas.

Amendments subject to controversy addressed five policy areas: fossil fuel use by federal buildings, carbon emissions regulation, regional haze regulation, Keystone XL Pipeline, and the Affordable Care Act (ACA, P.L. 111-148 as amended). Only the Keystone XL Pipeline amendment and one ACA amendment were the subject of major floor debate on S. 1392.

- S.Amdt. 1908 on the Keystone XL Pipeline called for a Sense of Congress resolution that would encourage the President to issue a permit needed to begin construction. In floor debate, proponents argued that the project would create thousands of jobs; generate tax revenues for federal, state, and local governments; reduce dependence on oil imports from Venezuela; and gain an “environmental advantage” from using high-tech refineries on the Gulf Coast. Opponents contended that there would be fewer than 100 permanent jobs, most of the oil would be exported, and there would be a “tangible risk” of a spill that could have severe environmental impacts.<sup>2</sup>
- S.Amdt. 1866 would have amended Section 1312(d)(3)(D) of ACA and would affect how Members of Congress, congressional staff, the President, the Vice President, and many executive branch political appointees can obtain health insurance coverage through their federal employment.<sup>3</sup> The sponsor of S.Amdt. 1866 requested a vote on the amendment and objected to further consideration of

---

<sup>1</sup> A House bill, H.R. 1616, was introduced as a companion to S. 761.

<sup>2</sup> Further discussion of the Keystone XL pipeline issue is provided in CRS Report R41668, *Keystone XL Pipeline Project: Key Issues*, by Paul W. Parfomak et al.

<sup>3</sup> Further discussion of that amendment is beyond the scope of this report. For more information about S.Amdt. 1866, contact Annie Mach, Analyst in Health Care Financing, Domestic Social Policy Division.

other amendments, which blocked voting on all other amendments. Shortly after floor debate began, the sponsor introduced a stand-alone bill (S. 1497) with similar content and expressed a willingness to drop the objection, if a vote could be “locked down” for S.Amdt. 1866—or if a vote on the proposal (S. 1497) could be guaranteed for any other active legislation.

Despite a tentative agreement to take votes on S.Amdt. 1908 and S.Amdt. 1866, supporters of non-energy amendments increased their requests to include four additional non-energy amendments. The resulting impasse led to a suspension of action on September 19, 2013, with no fixed date to resume action.

For more details on the legislative history of S. 1392, see CRS Report R43259, *S. 1392, Shaheen-Portman Bill: Energy Savings and Industrial Competitiveness Act of 2013*, by Fred Sissine.

## Action on S. 2074

The bill was introduced on February 27, 2014, and referred to the Senate Committee on Energy and Natural Resources. As introduced, S. 2074 comprised all the core provisions of S. 1392, with the addition of the text from 10 floor amendments proposed for S. 1392. Those amendments added new sections to the bill and increased the number of bill titles from four to five.

## Action on H.R. 2126

On March 5, 2014, the House passed H.R. 2126, the Energy Efficiency Improvement Act of 2014. The bill has four provisions, which line up closely with Sections 133, 141, 303, and 421 of S. 2262.

# S. 2262 Provisions

## Overview

Introduced on April 28, 2014, the text of S. 2262 is identical to that of S. 2074, except that the amount of budget offsets in section 501 was increased from \$638 million to \$720 million (for FY2014 through FY2018). **Table 1**, below, provides an overview of the bill provisions.

S. 2262 includes core provisions from S. 1392,<sup>4</sup> and the text of 10 proposed amendments to S. 1392 that were incorporated into S. 2074.<sup>5</sup> The bill has five titles. Title I has six provisions that address energy efficiency in buildings. Title II has five key sections that address energy efficiency in industry. Title III would establish four provisions to improve energy efficiency at federal agencies. Title IV would create seven provisions for federal agencies. Title V would provide a budgetary offset for bill authorizations.

## Tabular Summary

The following table summarizes the key provisions of S. 2262. The **Appendix** provides a more detailed list of provisions in the bill.

---

<sup>4</sup> A detailed description of S. 1392 appears in CRS Report R43259, *S. 1392, Shaheen-Portman Bill: Energy Savings and Industrial Competitiveness Act of 2013*, by Fred Sissine (Appendix A).

<sup>5</sup> *Updates to New Version of the Energy Savings and Industrial Competitiveness Act*, released February 27, 2014.

**Table 1. S. 2262, Tabular Summary of Selected Provisions**  
(Core = Provisions of S. 1392; Others = Amendments Proposed to S. 1392)

S. 2262 Organization	Source of Provision	Provision Description
<b>Title I: Buildings</b>		
Subtitle A: Building Energy Codes	Core	§101. Greater energy efficiency in building codes. Directs the Department of Energy (DOE) to update its model building energy codes for residential and commercial buildings, in order to meet new targets for aggregate energy savings. States, American Indian Tribes, and local governments would be encouraged to adopt the new energy codes, and DOE would be directed to ensure compliance in jurisdictions that adopt the codes.
Subtitle B: Worker Training and Capacity Building	Core	§111. Building training and assessment centers. Requires DOE to create a grant program that establishes building training and assessment centers at colleges and universities, to promote programs to expand building energy and environmental performance.
	Core	§112. Career skills training. DOE would be required to make grants to eligible nonprofit partnerships to pay the federal share of career skills training programs that help students become certified to install energy efficient building technologies.
Subtitle C: School Buildings	Collins-M. Udall (1912)	§121. Coordination of energy retrofitting assistance for schools. DOE would coordinate and provide technical assistance to support efficiency retrofits and renewable energy installations in schools.
Subtitle D: Better Buildings	Bennet-Ayotte (1847)	§131. Energy efficiency in federal and other buildings. Directs the General Services Administration (GSA) to prepare federal leasing provisions that encourage cost-effective energy efficiency measures.
		§132. Separate spaces with high-performance energy-efficiency measures. Requires EERE to study the feasibility of improving the energy efficiency of the design for new add-on (renovation) spaces that are part of commercial buildings.
		§133. Tenant star program. A voluntary certification and recognition program would be created as part of the Energy Star program, to recognize tenants in leased commercial buildings that achieve high levels of energy efficiency.
Subtitle E: Energy Information for Commercial Buildings	Franken (1855)	§141. Energy information for commercial buildings. Establishes “benchmarking” for federally leased buildings. Requires federally leased buildings to compare energy usage data with a baseline, where practical. Authorizes a grant program of \$2.5 million per year for 5 years for utilities, regulators, and utility partners to implement benchmarking and data disclosure for multi-tenant buildings.

S. 2262 Organization	Source of Provision	Provision Description
<b>Title II: Industrial Efficiency and Competitiveness</b>		
Subtitle A: Manufacturing Energy Efficiency	Core	§202. Future of industry coordination. Would reestablish and expand DOE's industrial materials program to set sustainable manufacturing goals, improve coordination of Industrial Research and Assessment Centers (IRACs) with other federal programs, fund outreach to IRACs, and require the Administrator of the Small Business Administration (SBA) to expedite loans recommended by IRACs.
	Core	§203. Sustainable manufacturing initiative. Directs EERE to perform industrial process energy efficiency assessments for manufacturers and conduct an industry-government partnership program on new sustainable manufacturing and industrial technologies and processes.
Subtitle B: Supply Star	Core (edited)	§211. Supply star. A "Supply Star" program would be established within EERE to incentivize private sector practices and products that use highly energy- and resource-efficient supply chains. The provision from S. 1392 was revised to remove a prohibition against using climate change as a factor in certifying businesses as having an efficient supply chain.
Subtitle C: Electric Motor Rebate Program	Core	§221. Electric motor rebate program. Directs DOE to create a rebate program for purchases of electric motors that cut energy use by at least 5%. Authorizes \$5 million per year for two years.
Subtitle D: Transformer Rebate Program	Core	§231. Electric power transformer rebate program. Directs DOE to create a rebate program for energy-efficient electricity transformers purchased by owners of industrial facilities, commercial buildings, and multifamily buildings. Authorizes \$5 million per year for two years.
<b>Title III: Federal Agency Energy Efficiency</b>		
	Core	§301. Energy-efficient information technology. Requires DOE to issue guidance for federal agencies to improve energy efficiency through the use of information and communications technologies.
	Core	§302. GSA project design updates. General Services Administration (GSA) would be authorized to use appropriated funds to update a building's design to meet energy efficiency and other resource standards for new federal buildings.
	M. Udall-Risch (1933)	§303. Energy-efficient data centers. Similar to H.R. 540 (Eshoo-Rogers), requires OMB to collaborate with federal agencies to promote energy-efficiency in data centers and other information technologies. OMB would be required to track and report on each agency's progress.
	Whitehouse-Collins (1852)	§304. Demonstration program for HUD multifamily housing. Establishes a demonstration program at HUD using energy savings contracts to perform efficiency retrofits on low-income housing.
<b>Title IV: Regulatory Provisions</b>		
Subtitle A: Third-party Certification for Energy Star	Landrieu-Wicker (1885)	§401. Third-party certification under Energy Star program. Requires the Environmental Protection Agency (EPA) and DOE to issue rules that third-party testing of energy efficiency for electronic products shall not be required for Energy Star program partners that have complied with Energy Star regulations for at least 18 months.

<b>S. 2262 Organization</b>	<b>Source of Provision</b>	<b>Provision Description</b>
Subtitle B: Federal Green Buildings	Landrieu-Wicker-Pryor (1886)	§411. High-performance green federal buildings. Directs DOE to review green building certification systems to encourage the use of the most comprehensive and environmentally sound approach.
Subtitle C: Water Heaters	Hoeven-Pryor (1916)	§421. Grid-enabled water heaters. Creates an exemption for thermal storage water heaters under the efficiency standards scheduled to go into effect in April 2015, so that large grid-enabled electric-resistance water heaters can continue to be manufactured for use only in demand response programs.
Subtitle D: Energy Performance Requirement for Federal Buildings	Hoeven-Manchin (1917)	§431. Energy performance requirements for federal buildings. Repeals federal building fossil energy elimination requirement and modifies other energy-savings targets. This is an updated version of the Hoeven-Manchin amendment.
	Isakson-Bennet (1844)	§432. Sets revised federal building energy efficiency performance standards. Expands the scope of existing energy efficiency standards for new federal buildings to cover major renovations. §433. Enhanced energy efficiency underwriting. Directs the Department of Housing and Urban Development (HUD) to update underwriting and appraisal guidelines to require that all home mortgages issued, insured, purchased, or securitized by a federal agency account for energy efficiency in the mortgage appraisal/underwriting process.
Subtitle E: Third Party Testing	Sessions-Pryor (1879)	§441. Voluntary certification programs for certain energy-using products. Requires DOE to recognize voluntary, independent certification programs for heating, air conditioning equipment and water heating products that meet specific qualifications.
<b>Title V: Miscellaneous</b>	Core (revised)	§501. Funding authorization offset. Would reduce the authorization for the Zero Net Energy Commercial Buildings Initiative set by the Energy Independence and Security Act of 2007 (EISA, §422). Offset increased to \$720 million for FY2014 through FY2018, compared with \$638 million in in S. 2074 (§501).

**Source:** S. 2074, S. 1392, and fact sheet summaries.



## Most Controversial Bill Provision

So far, only one provision of S. 2262 has been a major focus of controversy. Section 431 would repeal section 433 of the Energy Independence and Security Act of 2007 (EISA, P.L. 110-140).<sup>6</sup> The EISA provision set a timetable to cut fossil energy use in new federal buildings (and major federal building renovations)—with a target to eliminate fossil energy use in new buildings by 2030. The provision has proven difficult to implement, and DOE has not yet issued a rule to enforce it. Section 431 would also modify other EISA requirements. First, the existing EISA goal for a 36% federal energy reduction by 2015 (relative to the 2003 level) would be pushed back to 2017. Also, section 431 would direct DOE to review the results of the requirements to date and analyze the feasibility and cost-effectiveness of further postponing energy savings targets. Section 431 would still tighten some energy efficiency guidelines and building codes for new federal buildings.

The environmental and energy efficiency communities have split on this provision, with some in support and some in opposition. Supporters of Section 431 claim that the existing prohibition is unworkable, citing DOE's inability to develop a regulation to implement the law. Opponents to Section 431 say that the amendment would undermine federal leadership-by-example on net-zero energy buildings and on the effort to reduce federal greenhouse gas emissions.

## Energy Savings Estimate

The American Council for an Energy-Efficient Economy (ACEEE), which has publicly stated support for the bill, used a bottom-up analysis to estimate the energy-saving potential for each provision of S. 2074.<sup>7</sup> Combining those estimates yielded a total estimate for the whole bill. Then, a 5% real discount rate was applied to estimate the present value of potential energy cost savings. ACEEE's projections are summarized in **Table 2**.

**Table 2. ACEEE Energy Savings Estimates for S. 2074**

(all relevant provisions are identical to those of S. 2262)

Projection Year	Net Annual Energy Savings (in Quadrillion Btu,Q)	Net Annual Energy Cost Savings (\$ billions)	Net Jobs Created
2020	0.4	\$ 2.6	77,000
2030	1.8	\$ 16.2	192,000

**Source:** ACEEE, *Savings and Jobs in the Shaheen-Portman Bill 2014*, February 27, 2014, <http://www.aceee.org/fact-sheet/shaheen-portman>.

**Notes:** Dollar cost savings assume a real discount rate of 5%.

<sup>6</sup> During the 2013 floor action on S. 1392, a previous version of this provision was referred to as the Hoeven-Manchin amendment (S.Amdt. 1917). For more about the amendment, see CRS Report R43259, *S. 1392, Shaheen-Portman Bill: Energy Savings and Industrial Competitiveness Act of 2013*, by Fred Sissine.

<sup>7</sup> As mentioned previously, the provisions of S. 2262 are identical to those of S. 2074, with the exception of the budget authorization offset in section 501.

## CBO Cost Estimate

The Congressional Budget Office (CBO) estimates that S. 2262 would provide a net decrease in the deficit of \$12 million over the period from FY2014 through FY2024.<sup>8</sup> In deriving this estimate, CBO noted that some parts of the bill would increase direct spending by requiring Fannie Mae and Freddie Mac to revise certain standards related to underwriting mortgages.<sup>9</sup> However, other parts of the bill would reduce direct spending by modifying existing requirements to reduce consumption of energy generated from fossil fuels at certain federal buildings.<sup>10</sup>

## Support and Opposition<sup>11</sup>

Bill sponsors report that over 270 businesses, associations, and trade groups—from the National Association of Manufacturers to the Chamber of Commerce—support S. 2262.<sup>12</sup> During the 2013 debate, the bill sponsors of S. 1392 cited support from 260 business, environmental, and other organizations.<sup>13</sup> Business supporters included the U.S. Chamber of Commerce, Business Roundtable, and the National Association of Manufacturers. Environmental and energy supporters included the Sierra Club, Natural Resources Defense Council (NRDC), Alliance to Save Energy, and American Council for an Energy-Efficient Economy (ACEEE). Other organizations in support included the Christian Coalition.

The Obama Administration has not yet issued a *Statement of Administration Policy* on S. 2262. However, it did issue one for S. 1392, which expressed support for that bill. The *Statement* noted that S. 1392 would: (1) complement key energy efficiency dimensions of the President's Climate Action Plan; (2) support the President's goal to cut in half the energy wasted by U.S. homes and businesses by 2030; and (3) support the Administration's efforts to strengthen U.S. competitiveness through research and development investments in manufacturing innovation and productivity, such as the Department of Energy's (DOE's) Clean Energy Manufacturing Initiative.<sup>14</sup>

In opposition to S. 2262, Heritage Action—an advocacy group affiliated with the Heritage Foundation—argues that the incentives in the bill

would burden taxpayers and consumers alike while producing no tangible benefits. They are also duplicative of federal and state efforts... Heritage<sup>15</sup> explains that since the

---

<sup>8</sup> CBO, *CBO Estimate of the Statutory Pay-As-You-Go Effects for S. 2262, the Energy Savings and Industrial Competitiveness Act of 2014, as introduced on April 28, 2014*, May 1, 2014. <http://www.cbo.gov/sites/default/files/cbofiles/attachments/s2262paygo.pdf>.

<sup>9</sup> This is apparently a reference to the provisions of section 433.

<sup>10</sup> This is apparently a reference to the provisions of section 431.

<sup>11</sup> This section was prepared in October 2013 to describe support and opposition to S. 1392. No changes of positions have been noted since the introduction of S. 2074.

<sup>12</sup> "ESIC: The First Step Toward A Comprehensive Energy Strategy," *Forbes Magazine*, May 2, 2014, <http://www.forbes.com/sites/robportman/2014/05/02/esic-the-first-step-toward-a-comprehensive-energy-strategy/>.

<sup>13</sup> Statement of Senator Portman, *Congressional Record*, September 11, 2013, p. S6355.

<sup>14</sup> The White House, *Statement of Administration Policy on S. 1392*, September 11, 2013 [http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/113/saps1392s\\_20130911.pdf](http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/113/saps1392s_20130911.pdf).

<sup>15</sup> The citation to "Heritage" is apparently refers to a document published online by the Heritage Foundation at <http://blog.heritage.org/2014/05/02/congress-voting-efficiency-legislation-next-week-heres-bad-news/print/>.

efficiency gains do not have market value (or industries would already have adopted them), “the government must artificially create both the demand and the supply.”<sup>16</sup>

Further, Heritage Action concluded that

As Heritage notes, only the free-market has been proven to decrease costs and increase efficiency in energy production. The federal government’s role in energy efficiency should be limited to providing information to [help] consumers make well-informed decisions. This legislation allows the government to overstep its boundaries.<sup>17</sup>

Heritage Action also came out strongly against S. 1392 during floor action in 2013.<sup>18</sup>

## Senate Floor Action

S. 2262 was introduced on April 28, 2014. On May 1, 2014, the Majority Leader filed a motion to limit debate (invoke cloture) on the motion to proceed to S. 2262.<sup>19</sup> The motion to proceed was approved (79-20) on May 6, 2014. Floor debate continued through May 7, 2014, and was then suspended until May 12, 2014.

Prior to floor action, press reports indicated that one non-energy amendment on the Affordable Care Act and at least five energy-related amendments could possibly be offered.<sup>20</sup> Included among those five potential energy-related amendments were proposals to: (1) approve the Keystone XL pipeline, (2) facilitate approval of liquefied natural gas (LNG) exports, (3) prohibit EPA from requiring carbon capture technology on coal-fired power plants, (4) reduce the value of the social cost of carbon, and (5) prevent the establishment of a carbon tax.

As of May 7, 2014, a total of 71 amendments to S. 2262 had been introduced.<sup>21</sup> The amendments span a broad range of energy and environmental issues. Some address the energy topics noted above.

During debate over the bill, the Majority Leader emphasized a willingness to hold a separate vote on the Keystone XL pipeline—but only *after* floor action was completed on S. 2262. The Minority Leader noted that the possibility of an amendment to the Affordable Care Act had been dropped and stressed an interest in having four or five votes on energy-related amendments.<sup>22</sup>

---

<sup>16</sup> Heritage Action, “No” on the Shaheen-Portman Energy Efficiency Bill, May 2, 2014, <http://heritageaction.com/key-votes/shaheen-portman-energy-efficiency-bill/>.

<sup>17</sup> Heritage Action, “No” on the Shaheen-Portman Energy Efficiency Bill, May 2, 2014, <http://heritageaction.com/key-votes/shaheen-portman-energy-efficiency-bill/>.

<sup>18</sup> For details of its statement in opposition to S. 1392, see CRS Report R43259, *S. 1392, Shaheen-Portman Bill: Energy Savings and Industrial Competitiveness Act of 2013*, by Fred Sissine.

<sup>19</sup> Motion to Proceed to S. 2262, *Congressional Record*, pp. S2571, S2591, and S2603, May 1, 2014, <http://beta.congress.gov/crc/2014/05/01/CREC-2014-05-01-senate.pdf>. Also see “Reid Sets Up Test Vote on Energy Bill,” *CQ News*, May 1, 2014, <http://www.cq.com/alertmatch/213183302?5&uid=news-4468189>.

<sup>20</sup> “Amendment Tussle Overwhelms Energy Efficiency Bill,” *CQ News*, May 1, 2014, <http://www.cq.com/alertmatch/213176187?3&uid=news-4468141>.

<sup>21</sup> The text of the amendments appears in three issues of the *Congressional Record*. The May 5, 2014, issue covers amendments 2974 through 2984 (pp. S2650-S2676). The May 6, 2014, issue covers amendments 2985 through 3009 (pp. S2722-S2739). The May 7, 2014, issue covers amendments 3010 through 3043 (pp. S2799-S2823).

<sup>22</sup> *Congressional Record*, May 7, 2014, p. S2744.

## Floor Amendment Highlights

Some see the anticipated floor action on the energy efficiency provisions of S. 2262 as an opportunity to create a broader energy debate.

### Non-Energy Amendment: Affordable Care Act

One Senator has indicated the intent to again<sup>23</sup> offer an amendment that would modify the Affordable Care Act provision for Members of Congress and congressional staff and top level officials and staff of the Executive Branch.<sup>24</sup> Such a request could lead to a replay of a similar amendment that halted action on S. 1392. A detailed description of that topic is beyond the scope of this report.<sup>25</sup> A press report indicates that, on May 1, 2014, that Senator indicated that he would temporarily sideline that effort in return for votes on five energy proposals, including a vote to approve the Keystone XL pipeline.<sup>26</sup> During floor action, however, the Minority Leader noted that the possibility of an amendment to the Affordable Care Act had been dropped.<sup>27</sup>

### Energy-Related Amendments

Senate party leaders and bill sponsors are working to negotiate an agreement to limit floor action to no more than five amendments. Various press reports have suggested that the leading contenders for those five spots may include Keystone XL pipeline, LNG exports, power plant carbon capture requirement, social cost of carbon, and carbon tax.

### Keystone XL Pipeline

S. 2280<sup>28</sup> was introduced on May 1, 2014, to establish legislative approval for the Keystone XL pipeline.<sup>29</sup> In the negotiation process, some have expressed preference that S. 2280 come to the floor for a separate stand-alone vote—before action is taken on S. 2262.<sup>30</sup> Others apparently prefer to offer S. 2280 as an amendment to S. 2262.<sup>31</sup> A third view suggests that a vote on Keystone XL may be taken after work is completed on S. 2262.<sup>32</sup> For details about the debate

---

<sup>23</sup> During floor action on S. 1392, S.Amdt. 1866 (Vitter) proposed to make a similar change to the Affordable Care Act.

<sup>24</sup> Statement of Mr. Vitter, *Congressional Record*, pp. S2587-S2589, May 1, 2014, <http://beta.congress.gov/crec/2014/05/01/CREC-2014-05-01-senate.pdf>. Also, see “Amendments for Efficiency Debate Piling Up Again,” *CQ News*, April 30, 2014.

<sup>25</sup> For more information about this topic, contact Annie Mach, Analyst in Health Care Financing, Domestic Social Policy Division.

<sup>26</sup> “Reid Sets Up Test Vote on Energy Bill,” *CQ News*, May 1, 2014.

<sup>27</sup> *Congressional Record*, May 7, 2014, p. S2744.

<sup>28</sup> For more information about this bill, see CRS Insight IN10050, *Congressional Proposals to Approve the Keystone XL Pipeline*, by Linda Luther.

<sup>29</sup> During floor action on S. 1392, S.Amdt. 1908 (Hoeven) proposed to establish a Sense of the Senate provision in support of the Keystone XL pipeline.

<sup>30</sup> “U.S. Senators Push to Force Approval of Keystone Pipeline,” *Reuters*, May 1, 2014 <http://www.reuters.com/article/2014/05/01/us-usa-keystone-senate-idUSBREA400O320140501>.

<sup>31</sup> “Reid Open to Vote on KXL Approval Alongside Shaheen-Portman As Talks Continue,” *Environment and Energy Daily*, May 2, 2014, <http://www.eenews.net/eedaily/stories/1059998878/print>.

<sup>32</sup> “WGDB: Hoeven Predicts Keystone Vote Even If Energy Efficiency Bill Falts,” *CQ News*, May 2, 2014, <http://www.cq.com/alertmatch/213279676?2&uid=news-4468944>.

over the Keystone XL pipeline, see CRS Report R41668, *Keystone XL Pipeline Project: Key Issues*, by Paul W. Parfomak et al.

During floor action, one amendment was offered that would set policy for the Keystone XL pipeline: S.Amdt. 2991 (Hoeven).

## **Liquefied Natural Gas (LNG) Exports**

One Senator has announced plans to introduce an amendment to S. 2262 that would require DOE to approve liquefied natural gas exports (LNG) to all World Trade Organization member countries, including Ukraine.<sup>33</sup> The amendment would apply to pending and future applications to export LNG. Additionally, press reports indicate that another Senator has announced plans to offer an amendment that would accelerate LNG exports. That amendment would be based on the provisions of H.R. 6.<sup>34</sup>

During floor action, three amendments were offered that would affect natural gas exports: S.Amdt. 2981 (Barrasso), S.Amdt. 3038 (M. Udall), and S.Amdt. 3040 (M. Udall).

## **Power Plant Carbon Capture**

The Electricity Security and Affordability Act, S. 1905,<sup>35</sup> aims to block the Environmental Protection Agency's (EPA's) proposed rule that would effectively require new coal-fired power plants to install carbon capture and sequestration technology—unless certain benchmarks are met.<sup>36</sup> A press report indicates that there is an effort underway to attach the bill as an amendment to S. 2262.<sup>37</sup> Further discussion of the details of S. 1905 is beyond the scope of this report.<sup>38</sup>

During floor action, one amendment was offered that would affect power plant carbon capture: S.Amdt. 3013 (McConnell).<sup>39</sup>

## **Social Cost of Carbon**

The social cost of carbon is a quantitative measure used in cost-benefit analyses of climate change policies and energy efficiency rules.<sup>40</sup> One press report suggests that there is an effort to craft an amendment to S. 2262 that would undo a recent increase in the value of the social cost of

---

<sup>33</sup> Office of Senator John Barrasso, *Barrasso Plans to Introduce LNG Amendment to Shaheen-Portman*, May 1, 2014, [http://www.barrasso.senate.gov/public/index.cfm?FuseAction=PressOffice.PressReleases&ContentRecord\\_id=38f3dc25-a0ab-e669-5740-5fdd553264b5](http://www.barrasso.senate.gov/public/index.cfm?FuseAction=PressOffice.PressReleases&ContentRecord_id=38f3dc25-a0ab-e669-5740-5fdd553264b5).

<sup>34</sup> "Plot Thickens Ahead of Senate Energy Debate," *CQ News*, May 1, 2014.

<sup>35</sup> S. 1905 was introduced by Senator Manchin. An identical bill, Rep. Whitfield's H.R. 3826, passed the House March 6, 2014. The section is sometimes referred to as the Whitfield-Manchin amendment.

<sup>36</sup> During floor action on S. 1392, S.Amdt. 1958 (McConnell) would have prohibited federal regulation of carbon from power plants.

<sup>37</sup> "Plot Thickens Ahead of Senate Energy Debate," *CQ News*, May 1, 2014.

<sup>38</sup> For more information about S. 1905, contact Jim McCarthy, Specialist in Environmental Policy, Resources, Science, and Industry Division.

<sup>39</sup> Two other amendments—S.Amdt. 2996 (Thune) and S.Amdt. 3018 (Flake)—would set limits on regulation of power plant greenhouse gas emissions by the Environmental Protection Agency (EPA).

<sup>40</sup> In the floor debate over S. 1392, S.Amdt. 1854 would have prohibited the use of the social cost of carbon in regulations and other venues.

carbon established by the Administration for use in rulemaking decisions.<sup>41</sup> A related provision was proposed for S. 1392.<sup>42</sup>

## **Carbon Tax**

There is a continuing<sup>43</sup> debate over the potential to establish a carbon tax as a key policy for curbing emissions of carbon dioxide, the main greenhouse gas.<sup>44</sup> One press report suggests that there is an effort to devise an amendment that would establish a point of order to prevent Congress from imposing a carbon tax.<sup>45</sup>

During floor action, two amendments were offered that would establish a policy involving a carbon tax: S.Amdt. 2982 (McConnell) and S.Amdt. 2986 (Blunt).

## **Current Status**

The bill sponsors—together with leadership from both parties—worked to establish an agreement that would limit the number and type of amendments that would be considered for a vote. That effort was apparently unsuccessful. In floor action on May 12, 2014,<sup>46</sup> the bill was called up for a cloture vote to close debate. The initial tally (56-35) failed to reach the required 60-vote threshold, whereupon the Majority Leader changed his vote in order to reserve the right to move for reconsideration. Thus, the final vote tally was 55-36, and the Majority leader entered a motion to reconsider the vote by which cloture was not invoked on S. 2262.

---

<sup>41</sup> “Reid Open to Vote on KXL Approval Alongside Shaheen-Portman As Talks Continue,” *Environment and Energy Daily*, May 2, 2014, <http://www.eenews.net/eedaily/stories/1059998878/print>.

<sup>42</sup> S.Amdt. 1854 (Barrasso) to S. 1392 proposed that DOE and other agencies be prohibited from considering the social cost of carbon in regulations and other venues.

<sup>43</sup> During floor debate over S. 1392, S.Amdt. 1853 (Barrasso) proposed to prohibit regulations and energy taxes as a means to control carbon dioxide emissions and other greenhouse gases.

<sup>44</sup> In the floor debate over S. 1392, S.Amdt. 1853 would have prohibited the establishment of energy taxes as a means to control carbon/greenhouse gas emissions.

<sup>45</sup> “Reid Open to Vote on KXL Approval Alongside Shaheen-Portman As Talks Continue,” *Environment and Energy Daily*, May 2, 2014, <http://www.eenews.net/eedaily/stories/1059998878/print>.

<sup>46</sup> *Congressional Record*, May 12, 2014, p. S2899-S2901, <http://www.gpo.gov/fdsys/pkg/CREC-2014-05-12/pdf/CREC-2014-05-12.pdf>.



## **Appendix. S. 2262 Detailed Provisions<sup>47</sup>**

### **Title I: Buildings**

#### **Subtitle A: Building Energy Codes**

##### ***Section 101. Greater Energy Efficiency in Building Codes***

Strengthens national model building codes for new homes and commercial buildings by requiring the Department of Energy (DOE) to support their development, including the setting of energy savings targets and providing of technical assistance to the code-setting and standard development organizations.

DOE, in consultation with building science experts and institutions of higher learning, will produce a report on the feasibility, impact, economics and value of code improvements.

Section 304 of the Energy Conservation and Policy Act (ECPA, P.L. 94-163) is amended to change the State certification process so that within two years after model building codes are updated, States are to certify whether or not they have updated their building codes, and demonstrate if the building codes have met or exceeded energy savings targets.

The legislation reserves adoption and enforcement of model building codes to the states, but empowers DOE to offer technical assistance.

Section 307 of ECPA is amended to direct DOE to support the updating of model building energy codes by independent codes and standards developers, and to utilize the 2009 International Energy Conservation Code (IECC) for residences and the ASHRAE 90.1-2010 for commercial buildings as the baseline.

Authorizes \$200 million in funding to incentivize and assist states to meet the goals and requirements of the bill through the use of model codes.

#### **Subtitle B: Worker Training and Capacity Building**

##### ***Section 111. Building Training and Assessment Centers***

Establishes a DOE program for university-based Building Training and Assessment Centers, modeled after the existing Industrial Assessment Centers (IACs). Authorizes \$10 million in programmatic funding to train engineers, architects and workers in energy-efficient commercial building design and operations.

##### ***Section 112. Career Skills Training***

Creates a DOE career skills program to provide grants to nonprofit partnerships for worker training in for the construction and installation of energy-efficient building technologies. Authorizes \$10 million in funding to carry out this section, and establishes a 50 percent federal cost share.

---

<sup>47</sup> From the *Section-by-Section Summary of the Energy Savings and Industrial Competitiveness Act of 2014 (Shaheen-Portman)*, released February 27, 2014.

## **Subtitle C: School Buildings**

### ***Section 121. Coordination of Energy Retrofitting Assistance for Schools***

Requires DOE's Office of Energy Efficiency and Renewable Energy (EERE) to review all relevant standing energy efficiency programs and financing mechanisms currently available to schools by federal agencies, and to coordinate educational and outreach efforts to promote federal opportunities for assistance to schools.

Authorizes EERE to provide technical assistance to states, local educational agencies, and schools to help develop and finance energy efficiency projects. Requires EERE to cultivate and maintain an online database for relevant technical assistance and support staff. Directs EERE to recognize schools that successfully implement energy retrofit projects.

## **Subtitle D: Better Buildings**

### ***Section 131. Energy Efficiency in Federal and Other Buildings***

Requires the Administrator of General Services (GSA) to develop and publish model leasing provisions for use in federal leasing documents to encourage building owners and tenants to invest in cost-effective energy efficiency measures.

Requires the GSA to develop policies and best practices to implement such measures for the realty services provided by GSA to federal agencies, including periodic training of federal employees and contractors, and to make such available to state, county, and municipal governments that manage owned and leased building space.

### ***Section 132. Separate Spaces with High-Performance Energy Efficiency Measures***

Requires EERE to study the feasibility of significantly improving energy efficiency in commercial buildings through the design and construction of separate spaces with high-performance energy efficiency measures, and through encouraging owners and tenants to implement such measures in separate spaces. Requires the Secretary to publish such study on DOE's website.

### ***Section 133. Tenant Star Program***

Requires EPA and DOE to develop a voluntary Tenant Star program within the ENERGY STAR program to recognize tenants in commercial buildings that voluntarily achieve high levels of energy efficiency in separate spaces.

Requires DOE and the Energy Information Administration (EIA) to collect data on categories of building occupancy that consume significant quantities of energy and on other aspects of the property, building operation, or building occupancy determined to be relevant to lowering energy consumption.

## **Subtitle E: Energy Information for Commercial Buildings**

### ***Section 141. Energy Information for Commercial Buildings***

Requires a space leased by a federal agency in a building that has not earned the ENERGY STAR label to be benchmarked under an online, free benchmarking program, with public disclosure.



Requires an agency that is a tenant of a space that has not earned the ENERGY STAR label to provide to a building owner the energy consumption information of the space for use in meeting the benchmarking and disclosure requirements.

Requires the DOE to conduct a study on the impact of and best practices regarding state and local performance benchmarking and disclosure policies for commercial and multifamily buildings and the impact of utility policies for providing aggregated information to owners of multitenant buildings to assist with benchmarking programs.

Authorizes the Secretary to make awards to utilities, utility regulators, and utility partners to develop and implement programs to provide aggregated whole building energy consumption information to multitenant building owners. Such information is needed for benchmarking multi-tenant buildings.

Authorizes \$12.5 million in programmatic funding for FY2014 through FY2018.

## **Title II: Industrial Efficiency and Competitiveness**

### **Subtitle A: Manufacturing Energy Efficiency**

#### ***Section 201. Purposes***

Identifies the purpose of this section, including reforming and reorienting DOE's industrial efficiency programs; establishing consistent regulatory authority; accelerating the deployment of more efficient industrial technologies and practices; and strengthening public-private partnerships.

#### ***Section 202. Future of Industry Program***

Streamlines efforts by directing Industrial Assessment Centers (IACs) to coordinate with the Manufacturing Extension Partnership Centers of the National Institute of Standards and Technology and DOE's Building Technologies Program, and increases partnerships with the national laboratories and energy service and technology providers to leverage private sector expertise.

#### ***Section 203. Sustainable Manufacturing Initiative***

Requires EERE to provide onsite technical assessments to manufacturers seeking efficiency opportunities.

### **Subtitle B: Supply Star**

#### ***Section 211. Supply Star***

Establishes a DOE pilot program modeled on and in coordination with ENERGY STAR to identify examples and opportunities and promote practices for highly efficient supply chains.

Allows DOE to award companies financing (competitive grants/other incentives), technical support and training to improve supply side efficiency.

Authorizes \$10 million in programmatic funding for FY2014 through FY2023.

## **Subtitle C: Electric Motor Rebate Program**

### ***Section 221. Energy Saving Motor Control, Electric Motor, and Advanced Motor Systems Rebate Program***

Creates a DOE rebate program to incentivize purchases of new, high efficiency motor systems that reduce motor energy use by no less than 5%.

Authorizes \$5 million in programmatic funding for each of FY2014 and FY2015.

## **Subtitle D: Transformer Rebate Program**

### ***Section 231. Energy Efficient Transformer Rebate Program***

Directs DOE to launch an incentive rebate for the purchase of energy efficient transformers for industrial/manufacturing facilities or commercial/multifamily residential buildings.

Authorizes \$5 million for each of FY2014 and FY2015.

## **Title III: Federal Agency Energy Efficiency**

### ***Section 301. Energy-Efficient and Energy-Saving Information Technologies***

Requires the DOE, in consultation with other federal agencies, to issue recommendations to employ energy efficiency through the use of information and communications technologies – including computer hardware, operation and maintenance processes, energy efficiency software, and power management tools.

### ***Section 302. Availability of Funds for Design Updates***

Allows the General Services Administration to utilize funding to update the project design of approved building construction to meet efficiency standards.

### ***Section 303. Energy-Efficient Data Centers***

Requires federal agencies to coordinate with the Office of Management and Budget (OMB) to develop a strategy for implementing energy efficient and energy saving technologies and practices, along with annual evaluation of federal data centers for energy efficiency.

Directs DOE and Office of E-Government and Information Technology to maintain a data center energy practitioner program that leads to the certification of practitioners qualified to evaluate energy usage and efficiency opportunities at federal data centers.

Establishes an open data initiative for federal data center energy usage data to facilitate data center optimization and consolidation.

### ***Section 304. Budget-Neutral Demonstration Program for Energy and Water Conservation Improvements at Multifamily Residential Units***

Authorizes a demonstration program to allow the Secretary of Housing and Urban Development (HUD) to use budget-neutral performance-based contracts to conduct energy and water efficiency upgrades to HUD-assisted multifamily housing units. Under the structure, private investors would

fund the upfront costs of retrofits, and HUD would reimburse them with the related savings from reduced utility bills. The Secretary is authorized to issue contracts under the demonstration run until September 30, 2016. Contracts issued under this program may last no longer than 12 years. Payments will not be paid by the Secretary until utility savings have been validated by a third-party.

The program will be targeted towards residential units in multifamily buildings participating in rental assistance programs under section 8 of the U.S. Housing Act of 1937, the supportive housing for the elderly program under section 202 of the Housing Act of 1959, or the supportive housing for persons with disabilities program under section 811(d)(2) of the Cranston-Gonzalez National Housing Act.

## **Title IV: Regulatory Provisions**

### **Subtitle A: Third-party Certification Under Energy Star Program**

#### ***Section 401. Third-Party Certification under Energy Star Program***

Directs DOE and EPA to revise the Energy Star certification and verification requirements for electronic products to reflect that third party testing shall not be required for program partners that have complied with Energy Star regulations for at least 18 months.

Any exceptions granted that allow product developers to forgo third party testing would be terminated if the partner violates the exemption rules twice during a two-year period. The exemption would be reinstated if developers subsequently followed Energy Star regulations for a period of three years. The cost of this amendment would be covered by the current EPA and DOE Energy Star budget.

### **Subtitle B: Federal Green Buildings**

#### ***Section 411. High-Performance Green Federal Buildings***

Requires DOE to conduct an ongoing review into private sector green building certification systems and to work with other agencies to determine which certification system would encourage the most comprehensive and environmentally sound approach to certifying federal buildings.

Also, requires DOE to allow—in its review of green building certification systems—the inclusion of any developer or administrator of a rating system or certification system and allows the inclusion of responsible domestic sourcing credits and life-cycle assessment as a credit pathway in such certification systems.

### **Subtitle C: Water Heaters**

#### ***Section 421. Grid-Enabled Water Heaters***

Allows the continued manufacture of large-capacity, grid-enabled, electric-resistance water heaters, provided the water heaters include capabilities that intend for them to be used only in electric thermal storage or demand response programs. Provides additional energy conservation standards applicable to grid-enabled water heaters, and includes data reporting requirements for

manufacturers and utilities to report to DOE the number of units enrolled in electric thermal storage or demand response programs.

## **Subtitle D: Energy Performance Requirement for Federal Buildings**

### ***Section 431. Energy Performance Requirement for Federal Buildings***

Extends existing federal building energy efficiency improvement targets. Requires DOE to review the results of the implementation of the energy performance requirements and to analyze the cost-effectiveness and feasibility of extending the energy savings targets.

Requires federal energy managers to complete comprehensive energy and water evaluations every four years, to ensure that federal buildings are performing at their optimal level of energy efficiency, and to explain why agencies did not implement any energy- or water-saving measures that were deemed life-cycle cost effective.

Repeals the provision of Section 433 of EISA that established a requirement that federal buildings be designed so that the fossil fuel-generated energy consumption of each building be reduced on a timetable to 0% in 2030.

### ***Section 432. Federal Building Energy Efficiency Performance Standards: Certification System and Level for Green Buildings***

Expands the scope of existing energy standards for new federal buildings to cover major renovations.

Requires future rulemakings on federal building energy efficiency standards to include the existing administrative requirements of the “Guiding Principles for Sustainable New Construction and Major Renovations” for all new buildings of at least 5,000 sq. ft., unless found not to be life-cycle cost effective.

### ***Section 433. Enhanced Energy Efficiency Underwriting***

Requires HUD to develop and issue updated underwriting and appraisal guidelines for borrowers who voluntarily submit a qualified home energy report. The provision would cover any loan issued, insured, purchased, or securitized by the Federal Housing Administration (FHA) and other federal agencies, or their successors. The updated guidelines would adjust underwriting criteria and valuation guidelines to account for expected energy cost savings as an offset to other expenses and to account for present value of expected energy savings. If no qualified energy report is provided, no adjustment would be made. Lenders would be required to inform loan applicants of the costs and benefits of improving the energy efficiency of a home.

## **Subtitle E: Third Party Testing**

### ***Section 441. Voluntary Certification Programs for Air Conditioning, Furnace, Boiler, Heat Pump, and Water Heater Products***

Requires DOE to recognize voluntary, independent certification programs for air conditioning, furnace, boiler, heat pump, and water heater products. Requires DOE to rely on qualified voluntary certification programs to verify the performance rating of these products, provide annual reports of all test results, and maintain a publicly available list of all certified models, among other criteria.

## **Title V: Miscellaneous**

### ***Section 501. Offset***

Amends funding authorizations for FY2013-2018.

### ***Section 502. Budgetary Effects***

States that for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, the budgetary effect of this legislation shall be determined by reference to the latest statement titled “Budgetary Effects of PAYGO Legislation” for this act.

### ***Section 503. Advance Appropriations Required***

Provides that authorization of amounts under this act and the amendments made by this act shall be effective for any fiscal year only to the extent and in the amount provided in advance in appropriations acts.

## **Author Information**

Corrie E. Clark  
Analyst in Energy Policy

## **Acknowledgments**

Fred Sissine, retired CRS Specialist in Energy Policy, was the initial author of this report.

---

## **Disclaimer**

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS’s institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.